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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,916	10/01/2003	Adam Gronowski	PO-7945/PS-1132	8286

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LANXESS CORPORATION  
PATENT DEPARTMENT/ BLDG 14  
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PITTSBURGH, PA 15205-9741

EXAMINER

ASINOVSKY, OLGA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/676,916

Applicant(s)

GRONOWSKI ET AL.

Examiner

Olga Asinovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/01/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 and 12-13 of copending Application No. 10/436,558. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-8 and 12-13 of Application No. 10/436,558 disclose a compound that the chemical formulation of said compound is directly overlapping the chemical formulation of a compound in the present claims. The difference between the present claims and claims 1-8 and 12-13 of application No. 10/436,558 is the requirement in the present claims that the polymer has an average molecular weight Mw of more than 20,000g/mol. It would have been obvious to one of ordinary skill in the art to consider that a molecular weight of at least 20,000g/mol could be obtained to a polymer produced from isomonoolefin monomer in claims 1-8 and 12-13 of Application No. 10/436,558, since the resulted polymer is in a

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solid shape and produced under the similar polymerization conditions. The motivation is that it is within the skill of one in the art to consider that elastomeric polymer in claims 1-8 and 12-13 of application No. 10/436,558 can have an average molecular weight of at least 20,000g/mol because the reactants are the same and the resulted polymer can be in a solid shaped article, thus it would have been expected to provide adequate results for a polymer having an average molecular weight of at least 20,000 g/mol.

3. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al U.s. Patent 3,584,080.

The claimed elastomeric polymer comprises isomonoolefin monomer, multiolefin cross-linking agent, at least one chain transfer agent, solid material insoluble in boiling cyclohexane, at least one filler and a peroxide curing system. The statement in claim 1 is that the polymer composition does not include a conjugated aliphatic diene.

Walker discloses a vulcanized composition comprising cross-linked butyl copolymer.

The composition comprises isoolefin of 4 to 7 carbon atoms and a multiolefin cross-linking agent such as divinylbenzene, column 2, lines 35-50. The isoolefin is readable in applicants' claims being isomonoolefin monomer. The composition may include aliphatic dienes such as piperylene in the amount from 1 to 5 wt.% for moderating of the polymerization process, column 3, lines 70-75. The piperylene is within the scope of claimed chain transfer agent in the present claim 3. Although the present claim 1 does not require a conjugated aliphatic diene, the small amount of piperylene=1,3-pentadiene is a beneficiary ingredient as a chain transfer agent that is disclosed in the present claim 3 and recognized in Walker's invention. The cross-linked butyl polymer is vulcanizing in the present of organic peroxide curing agent, column 4, lines 30-48. The dicumylperoxide is readable in applicants' claim 5, column 4, line 62. The composition include other solid polymer such as polyethylene, filler and other additives, column 3, line 2, column 5, lines 40-45 and 57-63.

The difference between the present claims and Walker is the requirement of an average molecular weight of elastomeric polymer having more than 20,000 g/mol.

6. It would have been obvious to one of ordinary skill in the art to consider that a molecular weight of at least 20,000g/mol could be obtained to a polymer produced from isoolefin monomer in Walker's invention since the polymer is produced under the similar polymerization conditions for making in a solid shaped article such as tubes and cable jacketing, column 6, lines 50-53. The motivation is that it is within the skill of one in the art to consider that elastomeric polymer in walker's invention can have an average

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molecular weight of at least 20,000g/mol because the reactants are the same and the resulted polymer can be in a solid shaped article, thus it would have been expected to provide adequate results for a polymer having an average molecular weight of at least 20,000 g/mol.

7. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller et al U.S. patent 5,021,509 in view of Walker et al U.S. Patent 3,584,080.

Keller discloses a butyl rubber composition comprising a blend of butyl rubber, a multiolefin and minor amount of a copolymer of ethylene with a lower alkyl acrylate, column 2, lines 45-68, column 4, lines 18-23. The butyl rubber has a number average molecular weight of about 25,000 to about 500,000, column 3, lines 20-23. The butyl rubber is peroxide curable, column 5, line 14. The multiolefin such as piperylene is readable in applicants' claims as being a chain transfer agent, column 2, lines 65-66. The vulcanizable composition can include cross-linking agents, column 5, line 37. Any cross-linking agent is readable in Keller's invention.

Keller does not disclose the multiolefin cross-linking agent.

Walker has been discussed in the paragraph 6 above.

It would have been obvious to one of ordinary skill in the art to modify the vulcanizable butyl rubber composition in Keller's invention by employing a cross-linking agent such

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as divinylbenzene as teaching by Walker because Keller discloses a cross-linking agent as a conventional additive for a vulcanizable butyl rubber at column 5, line 37.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The closest prior art to Walker' 3,584,080 has been discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

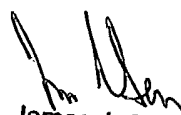
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.A.

O.A.  
September 18, 2004

Olga Asinovsky  
Examiner  
Art Unit 1711

  
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